7E7

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TWIN DIODE—REMOTE-CUTOFF PENTODE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3[□]	ac or dc volts
Current	0.3[□□]	amp

Direct Interelectrode Capacitances:[o]

Pentode Unit:

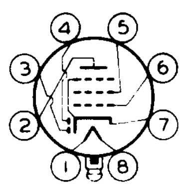
Grid No.1 to Plate	0.005 max.	μμf
Input	4.6	μμf
Output	5.5	μμf
Diode-No.1 Plate to Grid No.1	0.013 max.	μμf
Diode-No.2 Plate to Grid No.1	0.003 max.	μμf

[o] With external shield connected to cathode.

Mechanical:

Mounting Position	Any
Maximum Overall Length	2-25/32"
Maximum Seated Length	2-1/4"
Maximum Diameter	1-3/16"
Bulb	T-9
Base	Lock-In 8 Pin
Basing Designation for BOTTOM VIEW	8AE

Pin 1 - Heater
Pin 2 - Pentode Plate
Pin 3 - Diode-No.2 Plate
Pin 4 - Diode-No.1 Plate
Pin 5 - Pentode Grid No.2



Pin 6 - Pentode Grid No.1
Pin 7 - Cathode, Pentode Grid No.3
Pin 8 - Heater
Plug - Base Shell

PENTODE UNIT
AMPLIFIER - Class A_1

Maximum Ratings, ***Design-Center Values:***

PLATE VOLTAGE	300 max.	volts
GRID-No.2 (SCREEN) VOLTAGE	100 max.	volts
GRID-No.2 SUPPLY VOLTAGE	300 max.	volts
PLATE DISSIPATION	2 max.	watts
GRID-No.2 DISSIPATION	0.3 max.	watt
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Positive bias value	0 max.	volts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

(continued on next page)

[□] Nominal voltage = 7.0 volts. [□□] Nominal current = 0.32 ampere.

← Indicates a change.

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Typical Operation and Characteristics:

Plate Voltage	100	250	volts
Grid-No.2 Voltage	100	100	volts
Cathode-Bias Resistor	80	330	ohms
Plate Resistance (Approx.)	0.15	0.7	megohm
Transconductance	160(	1300	μmhos
Grid-No.1 Bias (Approx.) for transconductance of 2 μmhos	-36	-42.5	volts
Plate Current	10	7.5	ma
Grid-No.2 Current	2.7	1.6	ma

DIODE UNITS - Two

Maximum Ratings, *Design-Center Values*:

PLATE CURRENT (For Each Diode) . . . . . . 1 max. ma

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY